## **RAW SEQUENCE LISTING**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:	10/561,196
Source:	TFWP
Date Processed by STIC:	09/12/2006
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## ENTERED



DATE: 09/12/2006

IFWP!

PATENT APPLICATION: US/10/561,196 TIME: 10:55:08 Input Set : A:\056222-5089-US Sequence Listing.txt Output Set: N:\CRF4\09122006\J561196.raw 3 <110> APPLICANT: Dluzewski, Anton R Holder, Anthony A 5 Birdsall, Berry M 6 Babon, Jeff J 7 Martin, Stephen R 8 Morgan, William D 9 Feeney, James 10 Blackman, Michael J Fleck, Suzanne L 11 12 Saxty, Barbara 14 <120> TITLE OF INVENTION: SCREENING METHOD FOR SUBSTANCES BINDING TO MEROZOITE SURFACE 15 PROTEIN-1/42 17 <130> FILE REFERENCE: 056222-5089 19 <140> CURRENT APPLICATION NUMBER: US 10/561,196 20 <141> CURRENT FILING DATE: 2005-12-16 22 <150> PRIOR APPLICATION NUMBER: PCT/GB2004/002604 23 <151> PRIOR FILING DATE: 2004-06-18 25 <150> PRIOR APPLICATION NUMBER: GB 0314114.0 26 <151> PRIOR FILING DATE: 2003-06-18 28 <160> NUMBER OF SEQ ID NOS: 15 30 <170> SOFTWARE: PatentIn Ver. 2.1 32 <210> SEQ ID NO: 1 33 <211> LENGTH: 12 34 <212> TYPE: PRT 35 <213> ORGANISM: Plasmodium falciparum 37 <400> SEQUENCE: 1 38 Tyr His His His His His Ile Glu Gly Arg His 1 5 10 43 <210> SEQ ID NO: 2 44 <211> LENGTH: 14 45 <212> TYPE: PRT 46 <213> ORGANISM: Plasmodium vivax 48 <400> SEQUENCE: 2 49 Met His His His His His Ile Glu Gly Arg Trp Ile Leu 1 10 54 <210> SEQ ID NO: 3 55 <211> LENGTH: 383 56 <212> TYPE: PRT

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63 Glu Asn Glu Tyr Glu Val Leu Tyr Leu Lys Pro Leu Ala Gly Val Tyr

10

RAW SEQUENCE LISTING

59 <400> SEQUENCE: 3

61 1

57 <213> ORGANISM: Plasmodium falciparum

5

15

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Output Set: N:\CRF4\09122006\J561196.raw

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64	20			~1	25					30	_		
66 Arg Ser 67	35	гуs GI	n Leu	40	Asn	Asn	vaı	Met	Tnr 45	Pne	Asn	Val	
69 Asn Val 70 50	Lys Asp	Ile Le	ı Asn 55	Ser	Arg	Phe	Asn	Lys 60	Arg	Glu	Asn	Phe	
72 Lys Asn	Val Leu	Glu Se		T.em	Tle	Pro	ጥህን		Asn	T.e.11	Thr	Ser	
73 65	var neu	7	-	Leu	110	110	75	БуЗ	rop	Deu	1111	80	
75 Ser Asn	Tyr Val			Pro	Tyr	Lys		Leu	Asn	Lys	Glu		
76	-	85	_		_	90				•	95	-	
78 Arg Asp		Leu Se	r Ser	$\mathtt{Tyr}$	Asn	$\mathtt{Tyr}$	Ile	Lys	Asp	Ser	Ile	Asp	
79	100	-1 -1	_		105	_		_	_	110		_ ^	
81 Thr Asp		Phe Al	a Asn	_	Val	Leu	GLY	Tyr	_	Lys	He	Leu	
82 84 Ser Glu	115	Tare Se	r Aen	120	7 cn	Sar	T10	Larc	125	Тиг	Tla	Λcn	
85 130	пув туг	nys se	135	Бец	Asp	per	116	140	пуs	ıyı	116	ASII	
87 Asp Lys	Gln Glv	Glu As:		Lvs	Tvr	Leu	Pro		Leu	Asn	Asn	Ile	
88 145	<u>7</u>	15		-1 -	- 2 -		155					160	
90 Glu Thr	Leu Tyr	Lys Th	r Val	Asn	Asp	Lys	Ile	Asp	Leu	Phe	Val	Ile	
91		165				170					175		
93 His Leu	Glu Ala	Lys Va	l Leu	Asn	Tyr	Thr	Tyr	Glu	Lys	Ser	Asn	Val	
94	180				185					190			
96 Glu Val		Lys Gl	ג Leu		Tyr	Leu	Lys	Thr		Gln	Asp	Lys	
97	195			200	_	-1		<b>~</b> 1	205		_	_	
99 Leu Ala 100 210	_	газ га			Asn	Pne	vaı	-		Ala	Asp	Leu	
100 210 102 Ser Thr		r Aen U	21!		LOU	. T 01	Th.	220		. T.O.		Thr	
102 361 1111	. Asp Iyi		30	I ASI	пес	шес	235	_	PILE	: nec	ı ser	240	
105 Gly Met	: Val Phe		-	1 Ala	Lvs	Thr			Ser	- Asr	Len	-	
106		245			1	250					255		
108 Asp Gly	Asn Leu	ı Gln G	Ly Met	Leu	ı Asn	ıle	Ser	Gln	His	Glr	Cys	. Val	
109	260	)			265	;				270	)		
111 Lys Lys		s Pro G	ln Ası	n Ser	Gly	cys	Phe	e Arg	His	Let	ı Asp	Glu	
112	275			280		_	_		285		_	_	
114 Arg Glu	_	s Lys C			ı Asn	Tyr	Lys			ı Gly	Asp	Lys	
115 290 117 Pro Phe		. Ton C	29!		. 7	Dwa	. 7 ~~	300			. 7 ~~	<i>α</i> 1	
117 PIO PIE	: IID GI		os va. LO	LGIU	l ASI	PIC	315		1111	. Cya	ASI	320	
120 Asn Asr	n Glv Glv			a Asr	λla	Lvs			Gli	ı Glı	Asn		
121	· Ory Ory	325	ър 11 <u>1</u> 0		, ,,,,,,,,	330	_	, 1111	010	. 010	335		
123 Gly Ser	Asn Gly		s Ile	e Thr	Cys			Thr	Lys	Pro			
124	340				345		•		-	350			
126 Tyr Pro	Leu Phe	Asp G	ly Ile	e Phe	Cys	Ser	Ser	Ser	Asr	Phe	. Leu	Gly	
127	355			360					365				
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	135 <211> LENGTH: 395												
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RAW SEQUENCE LISTING DATE: 09/12/2006
PATENT APPLICATION: US/10/561,196 TIME: 10:55:08

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			_	Ile		Val	Thr	Met	Asp	Asn	Ile	Leu	Ser	Glv	Phe	Glu
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	Asn	Glu	Tvr	Asp	Val	Ile	Tvr	Leu	Lvs	Pro	Leu	Ala	Glv	Val	Tyr	Arq
144			•	20			- 4		25					30	-	_
146	Ser	Leu	Lvs	Lvs	Gln	Ile	Glu	Lvs	Asn	Ile	Ile	Thr	Phe	Asn	Leu	Asn .
147			35	4				40					45			
149	Leu	Asn	Asp	Ile	Leu	Asn	Ser	Arq	Leu	Lys	Lys	Gly	Glu	Ala	Ile	Ser
150		50	•				55			•	-	60				
152	Val	Thr	Met	Asp	Asn	Ile	Leu	Ser	Gly	Phe	Glu	Asn	Glu	Tyr	Asp	Val
153	65			-		70			•		75			•	-	80
155	Ile	Tyr	Leu	Lys	Pro	Leu	Ala	Gly	Val	Tyr	Arg	Ser	Leu	Lys	Lys	Gln
156		-		-	85			-		90	_			_	95	
158	Ile	Glu	Lys	Asn	Ile	Ile	Thr	Phe	Asn	Leu	Asn	Leu	Asn	Asp	Ile	Leu
159			_	100		•			105					110		
161	Asn	Ser	Arg	Leu	Lys	Lys	Gly	Ile	Ser	Tyr	Tyr	Glu	Lys	Val	Leu	Ala
162			115		_	_	_	120		_	-		125			
164	Lys	Tyr	Lys	Asp	Asp	Leu	Glu	Ser	Ile	Lys	Lys	Val	Ile	Lys	Glu	Glu
165		130					135					140				
167	Lys	Glu	Lys	Phe	Pro	Ser	Ser	Pro	Pro	Thr	Thr	Pro	Pro	Ser	Pro	Ala
168	145					150					155					160
170	Lys	Thr	Asp	Glu	Gln	Lys	Lys	Glu	Ser	Lys	Phe	Leu	Pro	Phe	Leu	Thr
171					165					170					175	
173	Asn	Ile	Glu	Thr	Leu	Tyr	Asn	Asn	Leu	Val	Asn	Lys	Ile	Asp	Asp	Tyr
174				180					185					190		
176	Leu	Ile	Asn	Leu	Lys	Ala	Lys	Ile	Asn	Asp	Cys	Asn	Val	Glu	Lys	Asp
177			195					200					205			
179	Glu	Ala	His	Val	Lys	Ile	Thr	Lys	Leu	Ser	Asp	Leu	Lys	Ala	Ile	Asp
180		210					215					220				
		Lys	Ile	Asp	Leu		Lys	Asn	Thr	Asn	Asp	Phe	Glu	Ala	Ile	
	225		_			230					235					240
	Lys	Leu	Ile	Asn	_	Asp	Thr	Lys	Lys	_	Met	Leu	Gly	Lys		Leu
186	_			_	245		_		_	250				_	255	_
	Ser	Thr	Gly	Leu	Val	Gln	Asn	Phe		Asn	Thr	Ile	He		Lys	Leu
189				260	_,		_		265	_		_	~-3	270	~3	_
	ше	GIu	_	Lys	Pne	Gin	Asp		ьeu	Asn	тте	ser		HIS	GIN	Cys
192	3	-	275	<b>~</b> 3	~	<b>n</b>	<b>~</b> 3	280		<b>a</b> 1	<b>G</b>	D1	285	*** **	<b>T</b>	2
	vai	_	ьys	Gln	Cys	Pro		Asn	ser	GIA	Cys		Arg	HIS	ьeu	Asp
195	<b>~</b> 3	290	<b>~1</b>	<b>~1</b>	<b>~</b>	T	295	*	T	7	m	300	<u>ما</u>	<b>~</b> 1	~1··	7 ~~
		Arg	GIU	GIU	Cys		Cys	ьeu	ьeu	Asn		ьуѕ	GIN	GIU	GIY	Asp
	305	<b>G</b>	**- 1	<b>a</b> 1	7	310	3	D	ml	<b>C</b>	315	a1	3	7	<b>a</b> 1	320
	ьys	Cys	vai	Glu		Pro	ASI	Pro	THE	_	ASII	GIU	ASI	ASII		GIY
201	C***	7 ~~	- ר ת	7 c-	325	mb~	C1	mb~	C1	330	λ α∽	C.~	C3	c.~	335	7~~
	cys	Asp	ATG	Asp	HIG	mr	Cys	Inr		GIU	Asp	ser	GIÀ		ser	Arg
204	T	Larc	т1.	340 Thr	C3	C1	C	መኮ~	345	Dro	7 0 -	G.~	Тъ-~	350 Pro	Lov	Dha
	тур	пур	355	IIII	Cys	GIU	Cys	360	пув	P10	Asp	ser	_	P10	ьеu	FIIE
207	7 c~	Gl v		Phe	Cvc	Ce~	Ce~		λαν	Dhe	Leu	G1 17	365	Ser	Dhe	T.e.i
	usb	370	TIG	FIIG	cys	261	375	261	usii	FIIG	neu	380	TIG	261	FIIG	ъęц
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Input Set : A:\056222-5089-US Sequence Listing.txt

Output Set: N:\CRF4\09122006\J561196.raw

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213 385
217 <210> SEO ID NO: 5
218 <211> LENGTH: 396
219 <212> TYPE: PRT
220 <213> ORGANISM: Plasmodium falciparum
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229 Ser Leu Lys Lys Gln Ile Glu Lys Asn Ile Phe Thr Phe Asn Leu Asn
230
           35
232 Leu Asn Asp Ile Leu Asn Ser Arg Leu Lys Lys Arg Lys Tyr Phe Leu
235 Asp Val Leu Glu Ser Asp Leu Met Gln Phe Lys His Ile Ser Ser Asn
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238 Glu Tyr Ile Ile Glu Asp Ser Phe Lys Leu Leu Asn Ser Glu Gln Lys
                     85
                                         90
241 Asn Thr Leu Leu Lys Ser Tyr Lys Tyr Ile Lys Glu Ser Val Glu Asn
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                                   105
244 Asp Ile Lys Phe Ala Gln Glu Gly Ile Ser Tyr Tyr Glu Lys Val Leu
                               120
247 Ala Lys Tyr Lys Asp Asp Leu Glu Ser Ile Lys Lys Val Ile Lys Glu
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                                               140
       130
250 Glu Lys Glu Lys Phe Pro Ser Ser Pro Pro Thr Thr Pro Pro Ser Pro
253 Ala Lys Thr Asp Glu Gln Lys Lys Glu Ser Lys Phe Leu Pro Phe Leu
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256 Thr Asn Ile Glu Thr Leu Tyr Asn Asn Leu Val Asn Lys Ile Asp Asp
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259 Tyr Leu Ile Asn Leu Lys Ala Lys Ile Asn Asp Cys Asn Val Glu Lys
           195
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262 Asp Glu Ala His Val Lys Ile Thr Lys Leu Ser Asp Leu Lys Ala Ile
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265 Asp Asp Lys Ile Asp Leu Phe Lys Asn His Asn Asp Phe Glu Ala Ile
                       230
                                           235
268 Lys Lys Leu Ile Asn Asp Asp Thr Lys Lys Asp Met Leu Gly Lys Leu
                   245
                                       250
271 Leu Ser Thr Gly Leu Val Gln Asn Phe Pro Asn Thr Ile Ile Ser Lys
272
                260
                                    265
274 Leu Ile Glu Gly Lys Phe Gln Asp Met Leu Asn Ile Ser Gln His Gln
                                280
           275
277 Cys Val Lys Lys Gln Cys Pro Glu Asn Ser Gly Cys Phe Arg His Leu
                            295
280 Asp Glu Arg Glu Glu Cys Lys Cys Leu Leu Asn Tyr Lys Gln Glu Gly
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                                            315
283 Asp Lys Cys Val Glu Asn Pro Asn Pro Thr Cys Asn Glu Asn Asn Gly
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Output Set: N:\CRF4\09122006\J561196.raw

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286 Gly Cys Asp Ala Asp Ala Lys Cys Thr Glu Glu Asp Ser Gly Ser Asn
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289 Gly Lys Lys Ile Thr Cys Glu Cys Thr Lys Pro Asp Ser Tyr Pro Leu .
290 355
                               360
292 Phe Asp Gly Ile Phe Cys Ser Ser Ser Asn Phe Leu Gly Ile Ser Phe
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293 370
295 Leu Leu Ile Leu Met Leu Ile Leu Tyr Ser Phe Ile
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301 <211> LENGTH: 396
302 <212> TYPE: PRT
303 <213> ORGANISM: Plasmodium falciparum
305 <400> SEQUENCE: 6
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315 Leu Asn Asp Ile Leu Asn Ser Arg Leu Lys Lys Arg Lys Tyr Phe Leu
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318 Asp Val Leu Glu Ser Asp Leu Met Gln Phe Lys His Ile Ser Ser Asn
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                                            75
321 Glu Tyr Ile Ile Glu Asp Ser Phe Lys Leu Leu Asn Ser Glu Gln Lys
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324 Asn Thr Leu Leu Lys Ser Tyr Lys Tyr Ile Lys Glu Ser Val Glu Asn
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                                   105
327 Asp Ile Lys Phe Ala Gln Glu Gly Ile Ser Tyr Tyr Glu Lys Val Leu
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330 Ala Lys Tyr Lys Asp Asp Leu Glu Ser Ile Lys Lys Val Ile Lys Glu
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333 Glu Lys Glu Lys Phe Pro Ser Ser Pro Pro Thr Thr Pro Pro Ser Pro
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                       150
336 Ala Lys Thr Asp Glu Gln Lys Lys Glu Ser Lys Phe Leu Pro Phe Leu
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339 Thr Asn Ile Glu Thr Leu Tyr Asn Asn Leu Val Asn Lys Ile Asp Asp
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342 Tyr Leu Ile Asn Leu Lys Ala Lys Ile Asn Asp Cys Asn Val Glu Lys
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345 Asp Glu Ala His Val Lys Ile Thr Lys Leu Ser Asp Leu Lys Ala Ile
                           215
348 Asp Asp Lys Ile Asp Leu Phe Lys Asn His Asn Asp Phe Asp Ala Ile
351 Lys Lys Leu Ile Asn Asp Asp Thr Lys Lys Asp Met Leu Gly Lys Leu
                   245
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354 Leu Ser Thr Gly Leu Val Gln Asn Phe Pro Asn Thr Ile Ile Ser Lys
                                  265
              260
357 Leu Ile Glu Gly Lys Phe Gln Asp Met Leu Asn Ile Ser Gln His Gln
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                               280
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VERIFICATION SUMMARY

DATE: 09/12/2006

PATENT APPLICATION: US/10/561,196

TIME: 10:55:09

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